

IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF SOUTH CAROLINA
COLUMBIA DIVISION

CA NO. 3:05-CV-02858-MJP

UNITED STATES OF AMERICA, ex rel.,)
MICHAEL K. DRAKEFORD, M.D.,)
)
Plaintiffs,)
)
v.)
)
)
TUOMEY d/b/a TUOMEY HEALTHCARE)
SYSTEM, INC.)
)
Defendant.)

DECLARATION OF THOMAS E. MACURDY, Ph.D.

I, Thomas E. MaCurdy, being over eighteen years of age and otherwise competent to testify, do depose and state as follows based upon my personal knowledge:

1. I am a Professor of Economics at Stanford University and the Managing Member of Acumen, LLC ("Acumen"). My curriculum vitae is contained in pages Acumen_000012-20 of Exhibit A to this declaration.

2. Acumen has a data use agreement with the Centers for Medicare & Medicaid Services (CMS). Under the data use agreement, Acumen has access to CMS depositories containing original Medicare Part A and Part B claims, including the Standard Analytic Files (SAF) and Medicare's Common Working Files (CWF). Regional CMS contractors, which formally pay providers, upload processed claims to

CWF files on a weekly basis. CMS constructs SAF files each year as an archive of the CWF files.

3. Through our duties as a CMS contractor, Acumen directly downloads SAF data annually through a dedicated network directly linked to the CMS mainframe, and similarly downloads the entirety of new CWF data on a weekly schedule. We process Medicare Part A and B claims according to CMS rules to create a single integrated database. In the database used for extraction, all data fields in claims are left unaltered.

4. In October 2009, Acumen received a request, through its CMS contact, Chris Worrall, to extract certain Medicare claims records relating to Tuomey Healthcare System from the CMS repositories to which we have access and to provide those records to the Department of Justice. The October 2009 report entitled "Description of Claims Extraction: United States v. Tuomey," attached as Exhibit A to this declaration, explains in detail the sources and methods that Acumen used to extract the claims records requested by the Department of Justice.

5. My team verified the extracted claims data and placed it in an encrypted file. The encrypted file was copied to three disks, each labeled "10-0002" and bearing the statement "Confidential – Subject to Protective Order." On or about October 27, 2009, my team sent one disk to each of the following individuals by Federal Express: Tracy Hilmer, U.S. Department of Justice, Civil Division, Washington, DC; Norman Acker, U.S. Attorney's Office, Raleigh, North Carolina; and Ruben Steck, Steck Consulting, Washington, DC.

I hereby certify under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

Dated: 1/15/10

Thomas E. MaCurdy
Thomas E. MaCurdy, Ph.D.
Managing Member
Acumen, LLC



Description of Claims Extraction: United States v. Tuomey

October 2009

Acumen LLC

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SUBJECT TO PROTECTIVE ORDER

Acumen_000001

EXHIBIT A

TABLE OF CONTENTS

1	Introduction	3
2	Data Sources	4
	2.1 Source of Medicare Extracts	4
	2.2 Source of Medicaid Extracts	4
3	Selecting Physician IDs	5
	3.1 Selecting Physician IDs Used to Extract Medicare Claims	5
	3.2 Selecting Physician IDs Used to Extract Medicaid Claims	6
4	Selecting Institutional Provider IDs	7
	4.1 Selecting Institutional Provider IDs Used to Extract Medicare Claims	7
	4.2 Selecting Institutional Provider IDs Used to Extract Medicaid Claims	8
5	Performing Claims Extractions	9
	5.1 Selection Criteria Used to Extract Medicare Claims	9
	5.2 Selection Criteria Used to Extract Medicaid Claims	10
6	Documentation	11

LIST OF TABLES

Table 3.1: Identification of UPINs, NPIs, and Medicaid Provider ID Numbers	5
Table 3.2: Additional Information on James Goodson	6
Table 4.1: Institutional Provider Names and ID Numbers Specified by the DOJ	7
Table 4.2: Results of POS File Search of Tuomey-Related Institutional Providers	7
Table 4.3: Results of NPPES Data Search of Tuomey-Related Institutional Providers	8
Table 5.1: File Types, Formats of Extracted Claims, and Timeframe	9

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1 INTRODUCTION

This document explains the methodology used to extract health-care claims associated with the Tuomey Healthcare System and claims associated with the 17 physicians specified by this DOJ (Department of Justice) request. The following discussion consists of 5 sections. Section 2 discusses our acquisition of data from original CMS sources. Section 3 describes the method of selecting the physicians' unique identification numbers used in the extractions. Section 4 details the process of determining the unique identification numbers of Tuomey-related institutional providers used in the extractions. Section 5 explains the process of extracting Medicare and Medicaid claims, classified by file type. Finally, Section 6 presents additional notes and documentation on the extracted data files.

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2 DATA SOURCES

This data request asks for claims from both the Medicare and Medicaid systems for the years 2003-current. The following discussion describes the sources of these claims.

2.1 Source of Medicare Extracts

Our source of Medicare Part A and B claims come from CMS (Centers for Medicare & Medicaid Services) depositories containing original claims: the Standard Analytic Files (SAF) and Medicare's Common Working Files (CWF). Regional CMS contractors, which formally pay providers, upload processed claims to CWF files on a weekly basis. CMS constructs SAF files each year as an archive of the CWF files.

Through our duties as a CMS contractor, our group directly downloads SAF data annually through a dedicated network directly linked to the CMS mainframe, and similarly downloads the entirety of new CWF data on a weekly schedule. We process Medicare Part A and B claims according to CMS rules to create a single integrated database. In the database used for extraction, all data fields in claims are left unaltered.

2.2 Source of Medicaid Extracts

Our source of all categories of Medicaid claims come from CMS depositories containing original claims: the Medicaid Analytic Extract (MAX) files and Medical Statistical Information System (MSIS). States, which formally pay providers, upload processed claims to MSIS on a quarterly or sometimes longer basis. CMS constructs annual MAX files as an archive of the MSIS files.

Through our duties as a CMS contractor, our group directly downloads MAX data when available through a dedicated network directly linked to the CMS mainframe, and downloads the MSIS data on at least a monthly schedule. During these monthly downloads, we acquire all new and updated files provided by the states. We process MAX and MSIS claims according to CMS rules to create a single integrated database. In the database used for extraction, all data fields in claims are left unaltered.

The latest update of South Carolina MSIS data used for this extraction occurred in August 2009. The claims included in this extraction were processed on or before June 30, 2009.

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3 SELECTING PHYSICIAN IDs

This section describes the selection of the physician identification numbers.

3.1 Selecting Physician IDs Used to Extract Medicare Claims

The extraction of Medicare claims associated with the physicians specified in this request used both UPINs and NPIs, which are code mappings identifying physicians and providers. Claims submitted prior to 2006 predominately reported a UPIN, claims submitted between 2006 and 2007 reported UPINs and/or NPIs, and claims submitted after 2007 predominately reported NPIs.

A search of the Medicare Physician Identification and Eligibility Records (MPIER) by physician name produced records matching the physician names and UPINs designated in this DOJ request.¹ A query of National Plan and Provider Enumeration System (NPPES) health care provider data confirmed a one-to-one mapping of UPINs to NPIs for 16 of the physicians.² Table 3.1 shows these mapping between UPINs and NPIs.

Table 3.1: Identification of UPINs, NPIs, and Medicaid Provider ID Numbers

Last name	First name	NPI	Medicaid Provider ID Number	UPIN
ANGUS	FLOYD			
BRINGS	HANS			
BRITTON	JOHN			
CRABBE	MARK			
CUNNINGHAM	KENT			
ELLETT	JAMES			
GOODSON	JAMES			
GOODSON	JAMES			
HEPFER	THOMAS			
KINCADE	TESSA			
LATHAM	HELEN			
MCDUFFIE	SCOTT			
MOSES	HENRY			
RIDDLE	SAMUEL			
SMITH	GEORGE			
STANFORD	JON			
WILLIAMS	BARNEY			
WILLIAMS	THEOPHILUS			
WILLIAMS	THEOPHILUS			

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¹ The MPIER file is a registry of physician UPINs. The MPIER file contains up-to-date information through 2008.

² The NPPES dataset is updated through August 2009. NPPES contains information on NPIs and other identification numbers, such as current and former UPINs. Additional information on NPPES can be found at: http://www.cms.hhs.gov/NationalProvIdentStand/06a_DataDissemination.asp

As shown in Table 3.1, the UPIN for physician James Goodson mapped to two unique NPIs. Table 3.2 presents selected variables from the NPPES in regards to James Goodson. The middle initial for NPI [REDACTED] matched the middle initial listed with UPIN [REDACTED] in the MPIER file; the middle initial for NPI [REDACTED] differed from the MPIER record. The extraction used both NPIs associated with James Goodson.

Table 3.2: Additional Information on James Goodson

NPI	[REDACTED]	[REDACTED]
Provider Last Name (Legal Name)	GOODSON	GOODSON
Provider First Name	JAMES	JAMES
Provider Middle Name	A	N
Provider Credential Text	M.D.	FNP
Provider Business Practice Location Address	365 W WESMARK BLVD	201 CASHUA ST
Provider Business Practice Location Address City Name	SUMTER	DARLINGTON
Provider Business Practice Location Address State Name	SC	SC
Provider Business Practice Location Address Postal Code	291501987	295323301
Provider Business Practice Location Address Telephone Number	8039058020	8433937452

3.2 Selecting Physician IDs Used to Extract Medicaid Claims

The extraction of Medicaid claims associated with the physicians designated in this DOJ request used NPIs and Medicaid Provider ID Numbers. A search through the NPPES identified 18 Medicaid Provider ID Numbers associated with these physicians, as shown in Table 3.1. Physician Theophilus Williams was linked to 2 Medicaid Provider ID Numbers. The Medicaid Provider ID Number [REDACTED] is also identified with Tuomey Gastroenterology Services, shown in Table 4.3. The Medicaid extraction used both Medicaid Provider ID Numbers associated with Theophilus Williams.

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4 SELECTING INSTITUTIONAL PROVIDER IDs

This section presents the process for selecting institutional provider identification numbers.

4.1 Selecting Institutional Provider IDs Used to Extract Medicare Claims

This DOJ request provided a list of institutional provider names and a set of related identification numbers as shown below in Table 4.1. A search through the Provider of Services (POS) file using the identification numbers specified by this request resulted in one match for the ID number associated with Tuomey Regional Medical Center [REDACTED]

Table 4.1: Institutional Provider Names and ID Numbers Specified by the DOJ

Institutional Provider Name	ID number
TUOMEY REGIONAL MEDICAL CENTER	[REDACTED]
TUOMEY GASTROENTEROLOGY SERVICES	
TUOMEY OBGYN SERVICES LLC	
TUOMEY OPHTHALMOLOGY SERVICES	
TUOMEY SURGICAL SERVICES LLC	
TUOMEY ANESTHESIA	
TUOMEY HEALTHCARE SYSTEM	
TUOMEY MEDICAL PROFESSIONALS, INC	
TUOMEY MEDICAL PARK	
TUOMEY PROFESSIONAL SERVICES	

A search of the POS file for records with "Tuomey" in the Provider Name field produced 4 additional Medicare Provider IDs linked to Tuomey owned-entities that were not specified by DOJ. Table 4.2 shows the results of this search.

Table 4.2: Results of POS File Search of Tuomey-Related Institutional Providers

Institutional Provider Name	Medicare Provider ID
TUOMEY HEALTHCARE SYSTEM	[REDACTED]
TUOMEY HOSPICE	
TUOMEY REG MED CTR SUBACUTE SC	
TUOMEY HOME HEALTH	
TUOMEY MEDICAL PARK LEE COUNTY	

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³ The September 2007 POS file was used for this analysis. More information on the POS file can be found at: http://www.cms.hhs.gov/NonIdentifiableDataFiles/04_ProviderofServicesFile.asp

4.2 Selecting Institutional Provider IDs Used to Extract Medicaid Claims

A query of NPPES data for records containing “Tuomey” in the Provider Organization Name field (*PROV_ORG_NAME_LEGAL_BUS_NAME*) produced the NPIs and Medicaid Provider ID Numbers shown in Table 4.3.

Table 4.3: Results of NPPES Data Search of Tuomey-Related Institutional Providers

Provider Organization Name (Legal Business Name)	NPI	Medicaid Provider ID Number
TUOMEY		
TUOMEY		
TUOMEY		
TUOMEY OBGYN SERVICES LLC		
TUOMEY OPHTHALMOLOGY SERVICES, LLC		
TUOMEY SURGICAL SERVICES LLC		
TUOMEY MEDICAL PROFESSIONALS, INC		
TUOMEY ANESTHESIA		
TUOMEY MEDICAL PROFESSIONALS		
TUOMEY		
TUOMEY		
TUOMEY GASTROENTEROLOGY SERVICES		
TUOMEY		
TUOMEY		
TUOMEY HEALTHCARE SYSTEMS		
TUOMEY HEALTHCARE SYSTEM		
TUOMEY MEDICAL PROFESSIONALS, INC		
TUOMEY MEDICAL PROFESSIONALS, INC		

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5 PERFORMING CLAIMS EXTRACTIONS

Following directions of the DOJ request, extracts of Medicare data include Inpatient, Outpatient, and Carrier claims, and extracts of Medicaid data consist of Inpatient and Other/Non-institutional claims. Table 5.1 summarizes the characteristics of these claims data, including: (i) Medicare and Medicaid claim file types, (ii) output formats, and (iii) the timeframes of the extracted claims. The discussion below describes the precise selection criteria used to extract individual claims.

Table 5.1: File Types, Formats of Extracted Claims, and Timeframe

	File Types	Format	Years of Service
Medicare	Inpatient	ASCII tab delimited; Claim-level	2003- 2009
	Outpatient	ASCII tab delimited; Claim-level	
	Carrier	ASCII tab delimited; Line-item	
Medicaid	Inpatient	ASCII tab delimited; Claim-level	2003- 2009
	Other/Non-institutional ⁴	ASCII tab delimited; Claim-level	

5.1 Selection Criteria Used to Extract Medicare Claims

Extraction of Medicare Inpatient and Outpatient claims adheres to the following rules:

1. Extract claims that have any of the Medicare Provider IDs listed in Table 3.1 in the institutional provider data field, *PROVIDER*.
2. Restrict records to those having billing dates (*THRU_DT*) from January 1, 2003, to June 30, 2009.
3. Exclude claims processed after September 25, 2009 (*DAILY_DT*).

Extraction of Medicare Carrier claims adheres to the following rules:

1. Extract claims in which the header or any line-item has any of the UPINs or NPIs listed in Table 2.1 in at least one of the following data fields: *RFR_UPIN*, *PRF_UPIN*, *RFR_NPI*, or *PRFNPI*.⁵
2. Restrict records to those having billing dates (*THRU_DT*) from January 1, 2003 to June 30, 2009.
3. Exclude claims processed after September 25, 2009 (*DAILY_DT*).

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⁴ The Other/Non-institutional file type includes: physician services, dental care, other practitioner services, clinic, outpatient hospital, home health, lab and x-ray, other services, sterilizations, abortions, personal care services, transportation, targeted case management, rehabilitation, physical therapy, occupational therapy, speech or hearing services, hospice benefits, nurse midwife services, nurse practitioner services, private duty nursing, religious non-medical health care institutions, durable medical equipment, residential care, psychiatric services, adult day care, and more.

⁵ For each claim, *RFR_UPIN* and/or *RFR_NPI* identify the referring physician; *PRF_UPIN* and/or *PRFNPI* identify the performing physician.

Each Medicare Carrier claim consists of a header and a bundle of line-items. Header variables apply to the entire claim, whereas line-item variables apply only to the specific line-item. Consequently, implementing Rule #1 can produce Carrier line-items that have none of the NPIs and UPINs listed in Table 3.1 in the physician data fields.

5.2 Selection Criteria Used to Extract Medicaid Claims

Extraction of Medicaid Inpatient claims adheres to the following rules:

1. Extract claims that have a Medicaid Provider ID Number or NPI listed in Table 4.3 in the provider billing data field, *PROVIDER_ID_NUMBER_BILLING*.
2. Restrict records to those having ending dates of service (*ENDING_DATE_OF_SERVICE*) from January 1, 2003 to June 30, 2009.
3. Exclude claims processed after June 30, 2009, using the date of payment adjudication data field (*DATE_OF_PYMT_ADJUDICATION*).

Extraction of the Medicaid Other/Non-institutional claims adheres to the following rules:

1. Extract claims that have a physician NPI or Medicaid Provider ID Number listed in Table 3.1 in the service provider data field, *PROVIDER_ID_NUMBER_SERVICING*.
2. Extract claims that have a Tuomey-related institutional ID listed in Table 4.3 in the provider billing data field, *PROVIDER_ID_NUMBER_BILLING*.
3. Restrict records to those having ending dates of service (*ENDING_DATE_OF_SERVICE*) from January 1, 2003, to June 30, 2009.
4. Exclude claims processed after June 30, 2009, using the date of payment adjudication data field (*DATE_OF_PYMT_ADJUDICATION*).

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6 DOCUMENTATION

The extraction of these data occurred during the week of October 19, 2009.

Data dictionaries accompany this document. The files Data_Dictionary_OP.pdf, Data_Dictionary_IP.pdf, and Data_Dictionary_CARRIER.pdf describe data variables appearing in Medicare's Outpatient, Inpatient, and Carrier file types. The data field, *BID*, in these Medicare data dictionaries corresponds to variable *BID_HILM_1* in the data files shipped for this request. The file Medicaid_Data_Dictionary.pdf describes the data variables appearing in Medicaid's Inpatient and Other/Non-institutional files.

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